

WHAT IS CLAIMED IS:

1. An imaging apparatus having a function of irradiating an object with irradiation means and sensing light transmitted through the object with image
5 sensing means, comprising:

control means for controlling an actual irradiation instruction timing for said irradiation means on the basis of a pre-irradiation delay time as a time between an instruction and irradiation of actual
10 irradiation of said irradiation means.

2. The apparatus according to claim 1, further comprising control means for controlling the actual irradiation instruction timing for said irradiation
15 means on the basis of the pre-irradiation delay time and an initialization time of said image sensing means.

3. The apparatus according to claim 2, wherein said control means determines a longer⁴ time of the
20 pre-irradiation delay time and the initialization time of said image sensing means as a delay time after an imaging instruction is input by a user until actual irradiation is executed by said irradiation means.

- 25 4. The apparatus according to claim 3, wherein said apparatus has a function of irradiating the object with said irradiation means and sensing light

transmitted through the object with said image sensing means through a movable grid, and

said apparatus further comprises control means for controlling the actual irradiation instruction
5 timing for said irradiation means on the basis of the pre-irradiation delay time as the time between an instruction and irradiation of actual irradiation of said irradiation means, and an initialization time of grid movement.

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5. The apparatus according to claim 4, wherein said control means determines a longer time of the pre-irradiation delay time and the initialization time of grid movement as the delay time after the imaging
15 instruction is input by the user until actual irradiation is executed by said irradiation means.

5. The apparatus according to claim 3, wherein said apparatus has a function of irradiating the
20 object with said irradiation means and sensing light transmitted through the object with said image sensing means through a movable grid, and

said apparatus further comprises control means for controlling the actual irradiation instruction
25 timing for said irradiation means on the basis of the pre-irradiation delay time, an initialization time of said image sensing means, and an initialization time of

grid movement.

7. The apparatus according to claim 6, wherein said control means determines a longest time of the pre-irradiation delay time, the initialization time of said image sensing means, and the initialization time of grid movement as the delay time after the imaging instruction is input by the user until actual irradiation is executed by said irradiation means.

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8. The apparatus according to claim 1, wherein said irradiation means irradiates the object with radiation.

9. An imaging system in which a plurality of devices are communicably connected, wherein

at least one of the plurality of devices has the function of said imaging apparatus of claim 1.

10. An imaging apparatus having a function of irradiating an object with irradiation means and sensing light transmitted through the object with image sensing means through a movable grid, comprising:

control means for controlling an actual irradiation instruction timing for said irradiation means on the basis of an initialization time of grid movement.

11. The apparatus according to claim 10, further comprising control means for controlling the actual irradiation instruction timing for said irradiation means on the basis of a pre-irradiation delay time as a
5 time between an instruction and irradiation of actual irradiation of said irradiation means, and the initialization time of grid movement.

12. The apparatus according to claim 11, wherein said
10 control means determines a longer time of the pre-irradiation delay time and the initialization time of grid movement as a delay time after an imaging instruction is input by a user until actual irradiation is executed by said irradiation means.

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13. The apparatus according to claim 10, comprising:
control means for controlling the actual irradiation instruction timing for said irradiation means on the basis of an initialization time of said
20 image sensing means and the initialization time of grid movement.

14. The apparatus according to claim 13, wherein said control means determines a longest time of the
25 initialization time of said image sensing means and the initialization time of grid movement as a delay time after an imaging instruction is input by a user until

actual irradiation is executed by said irradiation means.

15. The apparatus according to claim 10, further
5 comprising control means for controlling the actual
irradiation instruction timing for said irradiation
means on the basis of a pre-irradiation delay time as a
time between an instruction and irradiation of actual
irradiation of said irradiation means, an
10 initialization time of said image sensing means, and
the initialization time of grid movement.

16. The apparatus according to claim 15, wherein said
control means determines a longest time of the
15 pre-irradiation delay time, the initialization time of
said image sensing means, and the initialization time
of grid movement as a delay time after an imaging
instruction is input by a user until actual irradiation
is executed by said irradiation means.

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17. The apparatus according to claim 10, wherein said
irradiation means irradiates the object with radiation.

18. An imaging system in which a plurality of devices
25 are communicably connected, wherein

at least one of the plurality of devices has the
function of said imaging apparatus of claim 10.

19. An imaging control method of irradiating an object with irradiation means and sensing light transmitted through the object with image sensing means,
5 comprising the step of:

controlling an actual irradiation instruction timing for the irradiation means on the basis of a pre-irradiation delay time as a time between an instruction and irradiation of actual irradiation of
10 the irradiation means.

20. The method according to claim 19, wherein the actual irradiation instruction timing for the irradiation means is controlled on the basis of the
15 pre-irradiation delay time and an initialization time of the image sensing means.

21. The method according to claim 20, wherein a longer time of the pre-irradiation delay time and the
20 initialization time of the image sensing means is determined as a delay time after an imaging instruction is input by a user until actual irradiation is executed by the irradiation means.

22. The method according to claim 21, wherein
the light transmitted through the object is sensed with the image sensing means through a movable

grid, and

the actual irradiation instruction timing for the irradiation means is controlled on the basis of the pre-irradiation delay time as the time between an
5 instruction and irradiation of actual irradiation of the irradiation means, and an initialization time of grid movement.

23. The method according to claim 22, wherein a
10 longer time of the pre-irradiation delay time and the initialization time of grid movement is determined as the delay time after the imaging instruction is input by the user until actual irradiation is executed by the irradiation means.

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24. The method according to claim 21, wherein
the light transmitted through the object is sensed with the image sensing means through a movable grid, and

20 the actual irradiation instruction timing for the irradiation means is controlled on the basis of the pre-irradiation delay time, an initialization time of the image sensing means, and an initialization time of grid movement.

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25. The method according to claim 24, wherein a longest time of the pre-irradiation delay time, the

initialization time of the image sensing means, and the initialization time of grid movement is determined as the delay time after the imaging instruction is input by the user until actual irradiation is executed by the irradiation means.

26. The method according to claim 19, wherein the irradiation means irradiates the object with radiation.

27. An imaging control method of irradiating an object with irradiation means and sensing light transmitted through the object with image sensing means through a movable grid, comprising the step of:
controlling an actual irradiation instruction timing for the irradiation means on the basis of an initialization time of grid movement.

28. The method according to claim 27, wherein the actual irradiation instruction timing for the irradiation means is controlled on the basis of a pre-irradiation delay time as a time between an instruction and irradiation of actual irradiation of the irradiation means, and the initialization time of grid movement.

29. The method according to claim 28, wherein a longer time of the pre-irradiation delay time and the

initialization time of grid movement is determined as a delay time after an imaging instruction is input by a user until actual irradiation is executed by the irradiation means.

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30. The method according to claim 27, wherein the actual irradiation instruction timing for the irradiation means is controlled on the basis of an initialization time of the image sensing means and the
10 initialization time of grid movement.

31. The method according to claim 30, wherein a longer time of the initialization time of the image sensing means and the initialization time of grid
15 movement is determined as a delay time after an imaging instruction is input by a user until actual irradiation is executed by the irradiation means.

32. The method according to claim 27, wherein the
20 actual irradiation instruction timing for the irradiation means is controlled on the basis of a pre-irradiation delay time as a time between an instruction and irradiation of actual irradiation of the irradiation means, an initialization time of the
25 image sensing means, and the initialization time of grid movement.

33. The method according to claim 32, wherein a longest time of the pre-irradiation delay time, the initialization time of the image sensing means, and the initialization time of grid movement is determined as a delay time after an imaging instruction is input by a user until actual irradiation is executed by the irradiation means.

34. The method according to claim 27, wherein the irradiation means irradiates the object with radiation.

35. A computer-readable storage medium wherein said storage medium stores a processing program for executing said imaging control method of claim 19.

36. A computer-readable storage medium wherein said storage medium stores a processing program for executing said imaging control method of claim 27.